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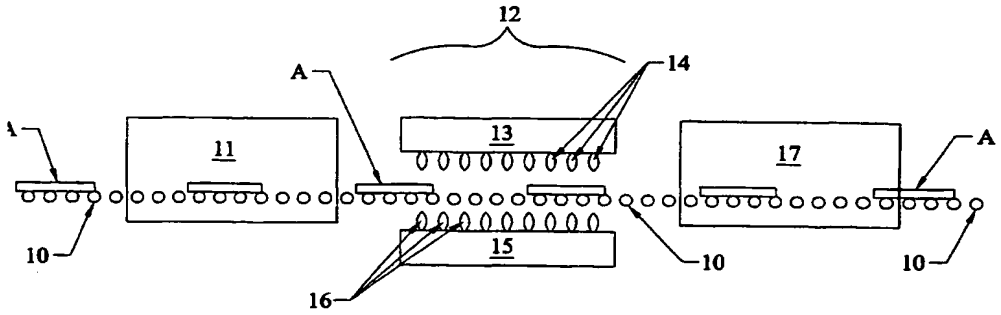
(54) Title: METHOD OF COATING CERAMICS USING CCVD



(57) Abstract: Methods for producing coatings on a glass substrate using combined chemical vapor deposition or other heat concentrated deposition (CHD) techniques. The term "glass" in this context is defined as those materials that crack, break or are otherwise damaged prior to plastic deformation of the material. In combustion chemical vapor deposition CCVD, a reagent and a carrier solution are mixed together to form a reagent mixture. The reagent mixture is then ignited to create a flame (14, 16), or alternatively, the reagent mixture may be fed to a plasma torch or other heat source. The combustion source may vaporize at least part of the reagent, the vapor phase of the reagent contacting the surface of the substrate (A) to be coated. In this manner, a film or coating is formed on the glass substrate (A). In some of the disclosed methods, the glass substrate (A) may be preheated, to avoid differential heating of the glass by the combustion source. Various methods of reducing the differential heating are disclosed. This differential heating may cause thermal shock or breakage of the glass substrate (A).

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